

**To:** William.R.Marhoffer@uscg.mil[William.R.Marhoffer@uscg.mil]  
**From:** Allen, HarryL  
**Sent:** Sat 8/8/2015 2:46:24 PM  
**Subject:** Re: Animas River Spill - Region 9 Staff deploying to coordinate with R8 and the Navajo Nation

Hi Bill

Turbidity and color are the biggest acute problems. There is some acidity associated w the water as well but dilution should rectify that. Dissolved metals have not resulted in observed acute toxic effects.

The particles will contain trace heavy metals perhaps including zinc, cadmium, lead, arsenic and mercury - these would be the longer term problem.

Sent from my iPhone

> On Aug 7, 2015, at 11:04 PM, "Marhoffer, William R CIV" <William.R.Marhoffer@uscg.mil> wrote:

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> Aloha Harry,

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> Is the water quality issue, besides the high sediment load, pH or was mercury in the tailings for gold extraction from the ore?

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> Just curious.

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> Bill

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> -----Original Message-----

> From: Allen, HarryL [mailto:Allen.HarryL@epa.gov]

> Sent: Friday, August 07, 2015 7:58 PM

> To: R9\_ER List

> Cc: ebranch@nndoj.org; bidthahnbecker@navajo-nsn.gov;

**Personal Email/Ex. 6**

**Personal Email/Ex. 6**

donbenn@navajo-nsn.gov; tflora@nndoj.org; perryinwr@gmail.com;

rbegay@nndoj.org; dtaylor@nndoj.org; cbradley@nndoj.org;

smpollack@nndoj.org; ronnieben@navajo-nsn.gov;

**Personal Email/Ex. 6**

ybarney@navajopublicwater.org; Ramona.nez@nndon.org; Johnson, AudreyL; Li, Corine; Montgomery, Michael; Cristiano, Gina; Ostrander, David

> Subject: Animas River Spill - Region 9 Staff deploying to coordinate with R8 and the Navajo Nation

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> Please be advised that Region 9 will send daily written updates to this notification list on EPA activities, highlighting new information each day. Also, Region 9 will host a daily Navajo Nation coordination call at 4pm Navajo Time (3PM PDT). Please join us. The call in number is:

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> Background

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> On August 5, 2015, EPA was conducting an investigation of the Gold King Mine, north of Silverton, CO. The intent of the investigation was to assess the on-going water releases from the mine, to treat mine water, and to assess the feasibility of future mine remediation. The plan was to excavate the loose material that had collapsed into the cave entry back to the timbering. During the excavation, the loose material gave way, opening the adit (mine tunnel) and spilling the water stored behind the collapsed

**Nonresponsive Conference Code**

material into Cement Creek, a tributary of the Animas River. Initial estimates are that the release consisted of approximately one million gallons of water (estimated from the dimensions of the mine adit) that was held behind unconsolidated debris near an abandoned mine portal. There were several workers at the site at the time of the breach, all were unharmed.

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> The mine discharge water presented in the Animas River as river-bound plume, easily distinguished by its bright yellow-orange color. As of Friday afternoon, 8/7, an aerial survey conducted by EPA's ASPECT (Airborne Spectral Photometric Environmental Collection Technology) documented that the mine discharge water was clearly visible as far south as Aztec, NM (ca. 7pm on 8/7). Observations on 8/7 noted that water in Cement Creek and the Animas River near Silverton is clearing. EPA expects conditions will continue to improve in the coming hours and days. The adit is still discharging lower flows into Cement Creek. Today, EPA is rebuilding settling ponds to treat these flows - should be completed on 8/8. EPA will treat the mine water diverted to the ponds with caustic soda and flocculent once the ponds are built.

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> EPA is coordinating with ATSDR in response to public health concerns/questions associated with the mine discharge water plume. ATSDR has been in communication with local health officials at San Juan County Basin Health Department in Colorado. Any public health questions/concerns from public health agency representatives may be directed to Chris Poulet, ATSDR/R8 at 303-312-7013.

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> EPA Region 8 has been coordinating with Region 6 and Region 9 and the states of Colorado, New Mexico, Utah, the Southern Ute Tribe. Region 6 is working closely with the New Mexico Environment Department (NMED) to evaluate possible impacts in New Mexico. Potentially impacted water systems have been notified and precautions are in place to ensure drinking water in homes is protected. Colorado officials are requiring all watercraft off the river, and other authorities are following suit. EPA and NMED are providing assistance to community water systems and closely monitoring the situation. Water sampling teams are on the ground in CO and NM (preliminary results are attached).

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> Site information, maps and sampling data are all available at:

[http://www.epaossc.org/site/site\\_profile.aspx?site\\_id=11082](http://www.epaossc.org/site/site_profile.aspx?site_id=11082)

<[http://www.epaossc.org/site/site\\_profile.aspx?site\\_id=11082](http://www.epaossc.org/site/site_profile.aspx?site_id=11082)> . Please request a password to view the geospatial viewer for an interactive map accessed through the webpage.

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> EPA Region 9 Activities

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> The discharge has yet to cross the Navajo Nation boundary, near Hogback, but Navajo officials have reacted quickly, assessing their water intake systems and issuing a precautionary "do not use" public service announcement regarding tap water. Region 9 reached out to Navajo EPA officials and subsequently were requested assist with ambient river sampling in the San Juan River. The Navajo EPA surface water monitoring program (Shiprock Office) collected water and sediment samples from the San Juan River today - prior to the spill impact. NNEPA also requested drinking water sampling support immediately for Navajo operated water intakes. Region 9 deployed 2 START contractors to coordinate and assist them with sample collection and lab services and will assist in creating a sampling Task Force with NNEPA, Navajo water agencies and potentially the Bureau of Reclamation.

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> Region 9 also is deploying an OSC Rob Wise to Durango to coordinate Navajo sampling Task Force updates and results with the Region 8 incident command post and will ensure command messages get back to Navajo officials in this early phase of the response. OSC Randy Nattis will deploy to the Navajo Nation on Monday to coordinate additional field activities. Other Region 9 staff may assist with these roles.

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> Region 9 will also deploy a Public Information Officer (PIO) to participate in a Joint Information Center (JIC), presently in Durango, with and other the affected Federal, State, County and Tribal agencies. This person will be the point-of-contact for Navajo official and media inquiries as well. The Region anticipates coordination with Navajo agencies on public health messaging and outreach and is prepared to provide additional assistance, e.g., consultation with drinking water supply subject matter experts and community involvement resources.

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